

ABSTRACT OF THE DISCLOSURE

A method and apparatus for positioning a mobile station in a Time-Division Multiple Access (TDMA) communication system are disclosed. The apparatus comprises a plurality of power detectors respectively located at predetermined positions and at least one controller coupled to the power detectors. The power detectors respectively measure a plurality of power values of the signal generated by the mobile station in a preset channel and a preset time slot, which are allocated to the handset by the TDMA communication system. The at least one controller is able to identify the handset according to the preset channel and the preset time slot and to determine the position of the handset according to at least one of the plurality of power values measured and the position of the corresponding detector.